Sanitized Copy Approved for Release 2011/08/11 : CIA-RDP80-00809A000700090488-0

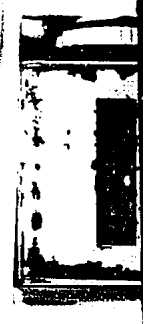
CLASSIFICATION CONFIDENTIAL
SECURITY INFORMATION
CENTRAL INTELLIGENCE AGENCY

INFORMATION FROM
FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT

CD NO.

50X1-HUM



COUNTRY Korea; China; Manchuria

SUBJECT Economic - Electric power

DATE OF INFORMATION 1937 - 1948

HOW PUBLISHED Charts, tables, book

DATE DIST. 3 DEC 1952

WHERE PUBLISHED P'yongyang, Tokyo

NO. OF PAGES 3

DATE PUBLISHED Sep 1937 - 1948

LANGUAGE Korean; Japanese

SUPPLEMENT REPORT NO.

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES, WITHIN THE MEANING OF TITLE 18, SECTIONS 793 AND 794, OF THE U.S. CODE, AS AMENDED. ITS TRANSMISSION OR REVELATION OF ITS CONTENTS TO OR RECEIPT BY AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. THE REPRODUCTION OF THIS FORM IS PROHIBITED.

50X1-HUM

THIS IS UNEVALUATED INFORMATION

SOURCE Documents as indicated.

ELECTRIC POWER TRANSMISSION ALONG KOREAN-MANCHURIAN BORDER

The following information on electric power plants, transmission lines, and installations has been taken from various Korean and Japanese documents listed in the appended sources. The report discusses border areas where electric power is transmitted from Korea to Manchuria, as follows: Sangsambong--K'ai-shan-t'un, Namyang--T'u-men, and Hunyung-- Hun-ch'un. Coordinates for the Korean place names have been taken from the Gazetteer to Maps of Korea, AMS 2, September 1950, Army Map Service; and for the Manchurian place names, from TM 30-487, April 1945, War Department.

Numbers in parentheses refer to appended sources.

Sangsambong--K'ai-shan-t'un

Sangsambong (42 41 N, 129 47 E) is located on the Tumen River about 9 kilometers south of Chongsong, county seat of Chongsong-gun, Hamgyong-pukto. According to a chart of the Ch'ongjin Electric Power Maintenance District prepared (probably in 1948) by the Office of Electric Power in the Ministry of Industry, Democratic People's Republic of Korea, electric power was transmitted to the Sangsambong station from the Ch'ongjin No 1 Transformer Station on 66-kilovolt lines (1). According to an electric power distribution chart prepared by the same authority in 1948, a 22-kilovolt line extended from Sangsambong to K'ai-shan-t'un, Manchuria.(2)

A table of transformer facilities prepared by the aforementioned authority in January 1948 shows that the Sangsambong station handled a maximum of 300 kilovolt-amperes. Three transformers rated at 100 kilovolt-amperes each were located there. The transformers, installed outdoors, were connected in a delta-delta circuit with 22-kilovolt primaries and 3.3-kilovolt secondaries. They were of the self-cooling 60 cycle-per-second single-phase type, manufactured by Hitachi.(3)

CLASSIFICATION CONFIDENTIAL

STATE	X	NAVY	X	NSRB	DISTRIBUTION							
ARMY	X	AIR	X	FBI								

Sanitized Copy Approved for Release 2011/08/11 : CIA-RDP80-00809A000700090488-0

Sanitized Copy Approved for Release 2011/08/11 : CIA-RDP80-00809A000700090488-0

50X1-HUM

A book published in 1937 by the Manchurian Electric Company, Tokyo, shows that the maximum output of the K'ai-shan-t'un transformer station was 3,300 kilowatts. There were six, three-phase transformers, each having a capacity of 32.5 kilovolt-amperes. Electricity was provided to 305 households with 960 light bulbs. There were eight industrial plants using electric power, but the K'ai-shan-t'un station had a capacity to serve 67 more plants.(4)

Namyang--T'u-men

Namyang [42 58 N, 129 51 E] is located in the northern extreme of Korea where the Tumen River makes a sharp bend to the south, between Chongsong and Unsong in Hamgyong-pukto. According to the chart of the Ch'ongjin Electric Power Maintenance District, the Namyang transformer station received electric power from the Ch'ongjin No 1 Transformer Station, and a 66-kilovolt line of hard-drawn twisted seven-strand copper wire, each strand 2.6 millimeters in diameter, extended from the Namyang station northward for a distance of 5.18 kilometers to the T'u-men transformer substation in Manchuria.(1)

The table of transformer facilities shows that in January 1948 the Namyang station handled a maximum of 520 kilovolt-amperes. Two 300-kilovolt-ampere transformers were located there. The transformers, connected in an open-delta circuit, were installed outdoors. They were the self-cooling, 60-cycle-per-second single-phase type, and manufactured by Nishijima.(3)

The T'u-men transformer substation, according to the book published by the Manchurian Electric Company, handled a maximum of 3,000 kilovolt-amperes. It had three transformers rated at 1,000 kilovolt-amperes each, with 66-kilovolt primaries and 3.3-kilovolt secondaries. In May 1937, 2,894 households were served representing a total load of 10,406 light bulbs. This substation also supplied 478 kilowatts to 39 industrial plants, and had a reserve capacity for a total of 471 plants.(4)

Hunyung--Hun-ch'un

Hunyung [42 54 N, 130 14 E] is situated east of Namyang on the Tumen River. According to the chart for the Ch'ongjin Electric Power Maintenance District the Hunyung transformer station received power from the Aoji transformer station. The Aoji transformer station in turn was connected with the Ch'ongjin No 2 Transformer Station. The chart also shows that a 66-kilovolt line composed of a hard-drawn seven-strand twisted copper wire, each strand 2.3 millimeters in diameter, extended from Hunyung to the Tumen River bank for a distance of 4.3 kilometers, and thence across the river to Hun-ch'un in Manchuria.(1)

According to the table of transformer facilities the Hunyung transformer station in January 1948 handled a maximum of 900 kilovolt-amperes with three 300-kilovolt-ampere transformers. These transformers, installed outdoors, were connected in a delta-delta circuit with 66-kilovolt primaries and 3.3-kilovolt secondaries. They were of the self-cooling 60 cycles-per-second single-phase type, manufactured by Shibaura.(3)

The book published by the Manchurian Electric Company shows that, in May 1937, the Hun-ch'un substation supplied electric light to 871 households comprising a load of 3,604 light bulbs. Two transformer stations were under construction which were expected to be completed by October that year. One of these stations was expected to have a capacity of 1,000 kilovolt-amperes handled by three transformers, and the other station was expected to have a capacity of 200 kilovolt-amperes also handled by three transformers.(4)

Sanitized Copy Approved for Release 2011/08/11 : CIA-RDP80-00809A000700090488-0

Sanitized Copy Approved for Release 2011/08/11 : CIA-RDP80-00809A000700090488-0

50X1-HUM

SOURCES

1. Ch'ongjin Chibu Pojongu Ilnam-do (Chart of Ch'ongjin Electric Power Maintenance District) P'yongyang, /1948/ /This chart and the following chart and table were prepared by the Office of Electric Power, Bureau of Industry, Ministry of Industry, Democratic People's Republic of Korea./

50X1-HUM

2. Chonyok Choryu-do (Electric Power Distribution Chart) P'yongyang, 1948

50X1-HUM

3. Pyonjon Solbi Ilnam-p'yo (Table of Electric Transformer Facilities) P'yongyang, January 1948

50X1-HUM

4. Manshyu ni Okeru Denki Kyokyu Jigyo Gaisetsu (Electric Power Supply in Manchuria), Research Department, Manchurian Electric Company, Tokyo, 25 September 1937

50X1-HUM

- E N D -

Sanitized Copy Approved for Release 2011/08/11 : CIA-RDP80-00809A000700090488-0